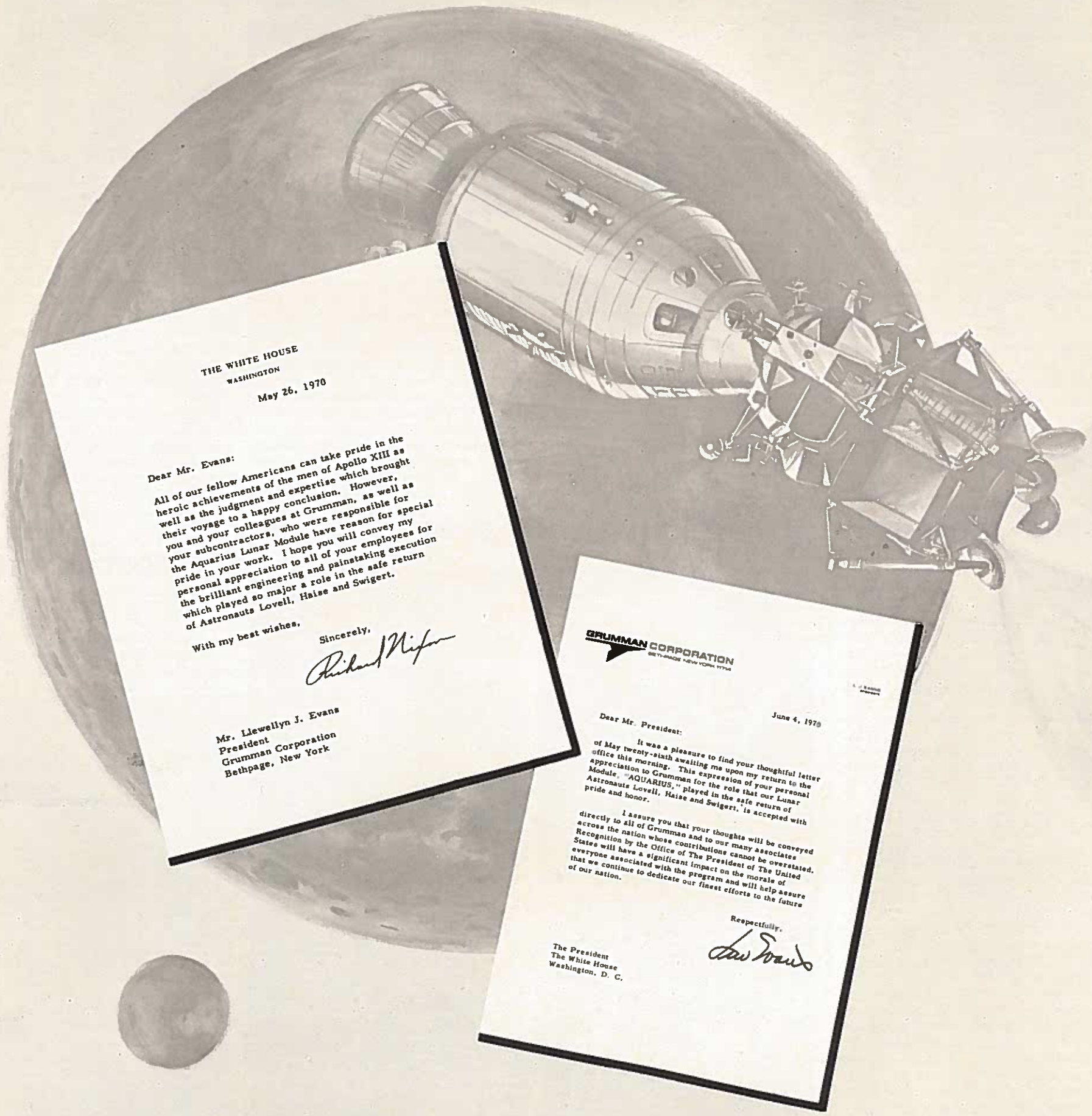
plane
GRUMMAN
news



THE WHITE HOUSE
WASHINGTON

May 26, 1970

Dear Mr. Evans:

All of our fellow Americans can take pride in the heroic achievements of the men of Apollo XIII as well as the judgment and expertise which brought their voyage to a happy conclusion. However, you and your colleagues at Grumman, as well as your subcontractors, who were responsible for the Aquarius Lunar Module have reason for special pride in your work. I hope you will convey my personal appreciation to all of your employees for the brilliant engineering and painstaking execution which played so major a role in the safe return of Astronauts Lovell, Haise and Swigert.

With my best wishes,

Sincerely,

Richard Nixon

Mr. Llewellyn J. Evans
President
Grumman Corporation
Bethpage, New York

GRUMMAN CORPORATION
BETHPAGE, NEW YORK 11714

June 4, 1970

Dear Mr. President:

It was a pleasure to find your thoughtful letter of May twenty-sixth awaiting me upon my return to the office this morning. This expression of your personal appreciation to Grumman for the role that our Lunar Module, "AQUARIUS," played in the safe return of Astronauts Lovell, Haise and Swigert, is accepted with pride and honor.

I assure you that your thoughts will be conveyed directly to all of Grumman and to our many associates across the nation whose contributions cannot be overstated. Recognition by the Office of The President of The United States will have a significant impact on the morale of everyone associated with the program and will help assure that we continue to dedicate our finest efforts to the future of our nation.

Respectfully,

Lew Evans

The President
The White House
Washington, D. C.

Skurla, Tripp, Kroupa take on new assignments

Vice President George Skurla has moved from Cape Kennedy to Plant 5, Chuck Kroupa has inherited Skurla's mantle at the Cape, and Vice President Ralph Tripp is now responsible for the OAO program. Others newly appointed include Ted Moorman, now OAO program manager; Ray Nightingale, deputy director for budgets in the Operations Planning and Budgets Department; Barton House, director of Advanced Planning.

Skurla, since 1966 Grumman's director of Operations at the Cape, is the new director of Product Engineering in charge of both aircraft and spacecraft product engineering efforts. To this responsibility he brings more than 25 years' experience in Research, Structural Flight Test, Business Development, and a tour of duty as chief engineer at Aerobilt Bodies. "Engineering, to me, is the soul of this Company," he says of his new job. "It's the front end of any new program we undertake and we must be continually aware of the Company's cost effectiveness and producibility needs. To put it simply, we have to produce at attractive prices so the customer can afford to buy from us. The engineers' sensitivity to this truth has a tremendous impact on what happens all down the line."

Skurla is occupying Senior Vice President Grant Hedrick's former office, Ext. 7170.

Dr. Tripp, who was named a Vice President early this year, continues as LM program director. He was program director for the OAO from 1962 to 1968. Since his early days with the Company, beginning in 1942, he successively headed Structural Flight Test, Research, and Test Instrumentation, and from 1958 to 1962 he was assistant director of Flight Test. Two weeks ago he received an honorary doctorate from Rocky Mountain College. His office and extension are as before: Plant 25, Ext. 2716.

As OAO program manager, Ted Moorman reports to Tripp (who hired him in 1948 for Flight Test, where he remained for the next 14 years). From 1962 to early '68, Moorman worked on LM, from proposal stage to the setting up of field test bases and flight mission planning and support. From there he moved to OAO, where he has been acting program manager. He is in Plant 41, Ext. 9480.

George Skurla

Chuck Kroupa

Heads Cape operations

Chuck Kroupa, new director of Operations for Grumman at Cape Kennedy, is a 24-year man, with 10 years in Flight Test and another 10 in Aerodynamics. For the last four years he has been in Florida as assistant base manager for LM and then as deputy director to Skurla. In the '40s he served as a commissioned officer in the Air Force. He reports to Joe Gavin, Senior Vice President, Space Programs, and he's based at KSC, Ext. 305-867-4170.

Ray Nightingale's responsibilities include the preparation, monitoring, and analyses as required to improve Grumman's cost performance on all direct labor, indirect labor, indirect non-salary expense, and other related budgets, such as travel. Assisting him are Robert Pirrung as manager of Manpower Planning and Labor Budgets, and Ted Jensen as manager of Indirect Dollar and Travel Budgets. Nightingale reports to Ed Siebert, director, Operations Planning and Budgets, and he is in Plant 5, Ext. 87316. Pirrung is in Plant 5, Ext. 87304. Jensen works in Plant 30, Ext. 86918.

Barton House, as director of Advanced Planning, reports to Senior Vice Presidents Grant Hedrick and Bill Zarkowsky. He is in Plant 5, on Ext. 3091.

Brief L.I. congressmen on future programs

United States congressmen from Long Island and N.Y. State representatives from the area were invited to Bethpage recently for a briefing on current Grumman products and the Company's future goals. They gathered at Plant 4 and viewed the numerous exhibits that had been on display for the annual Stockholders' Meeting.

Heading the Grumman "team" that made the presentation was President Lew Evans, shown in the photo at right talking to U.S. Congressman Otis Pike.

Wally Spielman, president of Grumman Allied Industries, Inc., is in the photo (far right) with U.S. Congressman Lester Wolff. In the bottom photo Grumman Vice Presidents Tom Rozzi (C) and Jack Rettaliata (R) are shown discussing Grumman prospects with U.S. Congressmen James Grover and John Wydler.

Also participating in the presentation to the congressmen were Joe Gavin, Senior Vice President, Space Programs; Mike Pelchach, Vice President, F-14 Program director; Vice President Chuck Vogeley, director of Sales for the Gulfstream II; and Pete Viemeister, president of Grumman Data Systems.

The congressmen, who viewed displays on ecology, manufacturing, all phases of the corporate structure, showed considerable interest in the designs for the future. They also inspected the new self-contained motor home being produced now by Grumman Allied Industries, Inc., and a Jeep equipped with special Markow wheels, originally designed for use on the lunar surface, that can operate on all types of terrain and in all temperatures.

Short shots

Clint Towl named as first recipient of Distinguished Businessman Award recently by the Better Business Bureau of Long Island. Towl helped to establish the bureau in this area about 10 years ago. . . . Dan Larkin now managing Systems Evaluation and Development for Computing Systems Department of Data Systems. . . . Field Servive reps from near and far away places were back in Bethpage a couple of weeks ago for their semi-annual briefing and updating on Company programs. . . . You say you didn't receive a card on your birthday from the Company? Well, there was a temporary halt in distributing the cards a month or so ago, but that program has been put back on the track. But if you were among those overlooked, now you'll have to wait 'til next year. . . . Leon Maggio, Radiation Protection officer for Grumman, named by Aerospace Industries Association of America as its representative on the American National Standards Committee N43.

Fred Pollard of Product Support was session chairman of Fluid Containment-Hydraulic Systems Seals at recent Air Force Materials Symposium in Miami Beach Fla., and also delivered paper entitled "Elastomeric Seals for Aircraft Fluid Power Systems (-65°F to +300°F). . . . Attack Squadron 42, the A-6 Intruder training squadron based at the Naval Air Station Oceana, at Virginia Beach, Va., racked up its 35,000th accident-free flight hour last month.

Grumman wins study contract for NASA orbiting observatory

Grumman Aerospace has won a $250,000 contract for a Phase B study of Marshall Space Flight Center's High Energy Astronomy Observatory. Of the companies invited by the National Aeronautics and Space Administration to submit proposals, five responded, and Grumman and TRW Systems each received a study contract.

The new observatory, known as HEAO, will have a projected life of two years in orbit and will carry instruments for what may prove to be very dramatic investigations into the mysteries of cosmic, Gamma, and X-rays in outer space, beyond earth's atmosphere.

The HEAO program could be worth $75 million, according to Frank Canning, HEAO program manager—if, as he predicts, Grumman should receive the follow-on Phase C-D hardware contract. The whole B-C-D program is on a tight schedule, he pointed out. Phase B studies, encompassing preliminary design, and the program plans for continuing Phases C and D, are to be finished in 10 months. C and D will include the detailed design, fabrication, test, and launch of two or more spacecraft. First launch: mid-1974.

"With its associate contractors, Grumman has the experience and the facilities to undertake this project efficiently," Canning emphasizes. Clean Room and test equipment are at hand as a result of the years devoted to LM and OAO production.

Bendix Corporation's Navigation and Control Division and Hughes Aircraft Company are the contractors associated with Grumman on HEAO, Bendix for the attitude sensing and control and experiment integration, Hughes in the communications and data management area. Both firms are experienced in advanced spacecraft systems.

NASA has not yet announced what experiments HEAO will carry.

Grumman's Research Department is associated with three eminent physicists who are candidate experimenters: Dr. Luis Alvarez of the University of California at Berkeley, Dr. Robert Hofstadter of Stanford University—both Nobel Prize winners in physics—and Dr. Luke Yuan, senior physicist of the Brookhaven National Laboratory. The program has received the highest priority in space physics and astronomy from the NASA Astronomy Missions Board and the National Academy of Sciences.

"In HEAO we anticipate low cost and high scientific yield," says John Purcell, assistant program manager. "HEAO will make observations in the spectrum previously recorded only in brief rocket and balloon flights. We have going a combination astronomy observatory and physics laboratory for scientific investigations, the results of which could have many future practical applications—as did the studies in atomic physics that led to atomic power plants."

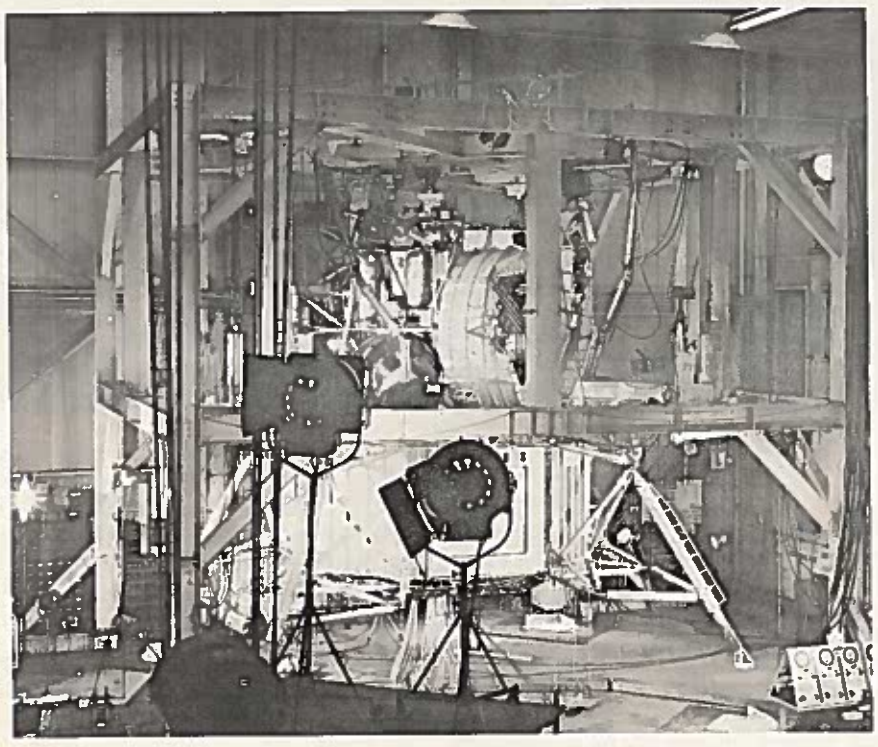
HEAO, taller by a third than a Lunar Module, and 10 feet in diameter, will weigh 20,000 pounds, including 12,500 pounds of scientific payload. The Grumman/NASA Orbiting Astronomical Observatory, wheeling around the earth in its 18th month of orbit and still sending back new information on the stars and the universe, weighs 5,000 pounds, including 1,000 pounds of payload. HEAO will be NASA's largest unmanned satellite.

Big satellite. **Grumman has received a Study B contract for HEAO, High Energy Astronomy Observatory, NASA's largest unmanned satellite, which will weigh, with experiments, 20,000 pounds. Frank Canning (R) is HEAO program manager. John Purcell (C) is asst. program manager, and Bob Papsco is Engineering manager. (Photo by Nat Scherer)**

Canning has been with Grumman since 1954. He began in Flight Test, was West Coast representative on the Eagle Missile, became Echo Satellite program manager in the early '60s, and then moved to the LM program, 1962-67. Since then he has been program manager on AAP/LM-A until moving over to the HEAO proposal.

Purcell started with Grumman in 1963. He completed the two-year Professional Development Program, dividing his time among Project Engineering, Contracts, Business Development, and Corporate Planning. He is liaison officer with NASA on all unmanned space programs, and he was Systems Engineering group leader on LM.

Engineering Manager Bob Papsco has been test project engineer on LM and, on OAO, section chief for the Optics Power Guidance and Control group and Stabilization and Control group leader. He has been involved in Engineering Design Administration on OAO spacecraft 3 and 4.



On camera. **Here, in Plant 31, Bethpage, Grumman photographers recorded a drop test of Lunar Module 10, which is now going through a series of additional tests in Plant 5. The scene is set up for motion picture documentation. (Photo by Fred Annette)**

How to improve on success . . . keep testing, keep testing

Lest someone suppose that Lunar Modules for future Apollo missions are sitting, just waiting for liftoff, take note. LM-10, the LM scheduled to depart for the moon in the summer of '71 on the Apollo 16 mission, is undergoing a whole battery of tests. Its structure has been modified to accommodate a lunar roving vehicle, built by Boeing, to be used for an extended stay on the moon, and a new configuration must be thoroughly proved out.

Astronaut John Young, Apollo 16 commander, and his LM pilot, Charlie Duke, visited Plant 5 this week to investigate the interior of the modified LM-10 ascent stage. To make everything ready for this suited-up mobility testing, crew compartment fit and functional (called "C-square F-square), preparations have been under way. Meantime, the descent stage of LM-10 is proceeding through its Cold Flow-II test sequence. Later this month, also in Plant 5, area 23, full vehicle launch and boost tests, using a 37,000-pound LTA-3D/R, will begin. Len Wasserman and Barry Smith are in charge.

In Plant 31, John Devitt and Ray Nardone are directing a whole series of support development test on the LTA-11 (test article for LM-10) with a simulated LRV aboard. After drop and instrumentation and other tests, the LTA-11 will go to Houston for acoustic testing and then come back for more drop tests with a prototype of the LRV on board. A "big glob of steel" is the stand-in for the 400-pound lunar rover in the present series.

Jerry Goldmacher is LM-10 spacecraft director. Will Leonard is structural and drop test manager.

Family affair. **Pat Cherry (L), Grumman Corporation Treasurer and Comptroller, digs into his wallet to buy the first GAA membership ticket sold by his brother, Mike, who is directing the campaign. The GAA tickets cost $1, and the funds gained through the annual drive are used to equip teams, sponsor many sports and activities, and provide suitable awards. (Photo by Fred Annette)**

GAA tickets can pry open door to vacation, recreation, relaxation

What's a vacation for? It's time for "relaxation and rest," says the dictionary, but for many people a vacation is the most active period of the year. Some people work hard during a vacation—painting the house, building a boat, doing myriad things.

Possibly it's just a chance for you to do what you want—whether it's lolling on the beach, sightseeing by day and dancing at night, or keeping busy doing just nothing.

Perhaps a vacation SHOULD provide a change of pace, from the daily grind.

Well, it's easy to buy a piece of a year-round vacation for $1. Go to new places, meet new people, develop new interests. The simple answer to all this is to become active in one or more of the many sports and recreational activities sponsored and planned by the GAA through its many league and club affiliates. You don't necessarily have to be a ball player, golfer, or even a tennis player. There are many other opportunities, such as tours, cut-rate tickets to baseball, football and basketball games in the major league category . . . shows to display the talents of your hobbies—it's all a chance to get into the swing of things and off that ol' rockin' chair.

The annual Grumman Athletic Association drive is on right now. The $1 membership tickets have been distributed to areas of the Company. Please remember that the drive only extends to June 22. Buy the ticket now, and get in on a special prize drawing.

The prize drawing for 1970 membership ticket holders will be held Thursday, June 25.

The top 15 prizes will be Polaroid cameras, model 350 color pack. The camera has an automatic electronic development timer that lights up during picture development and beeps when the color print has been processed; triplet lens, electric eye, electronic shutter; four exposure ranges; Zeiss Ikon folding range and viewfinder, and full accessory capability.

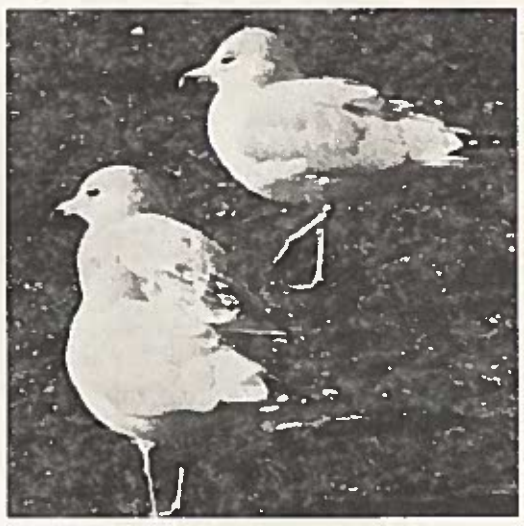
Fifty sets of Grumman glasses are also on the prize list.

Will success spoil . . .

Will success spoil Ed Okon? Let's hope not, but only time will tell. Emo, as he is known to his co-workers in Presentations Services, Plant 5, took over as manager of the famed Zots and will direct their fortunes this year in a Bethpage after-hours softball loop. After finishing with a 9-0 mark last year (they're all losses, by the way), there seems nowhere to go but up. But after last week there aren't too many people who would bet the family jewels on that, either. Why? The Zots warmed up for the coming campaign by keeping their "record" intact—they dropped another one, 32-8.

Would you believe

this . . .



could do this . . .

Believe it or not, aircraft vs. sea gull is a too common occurrence and just lately a twin-jet Gulfstream II took off from Bethpage, met a flock of gulls, and at least one gull was swallowed up by the left engine. What happened? Many of the engine blades were shredded by that feathery little creature causing instant engine failure—though the pilot landed safely at Calverton.

Before many tears are shed for the sea gull, think a bit about why it happened. Fundamentally, the gulls are on the search for grubs, worms, pieces of sandwiches—and scraps of paper that (to the gulls) look like food.

There's a message here, an Earth-Day type message with some urgency. You can help. Please don't throw away half-eaten sandwiches or food wrappings on the ground, especially near an airport. **Let's police the area and keep it clean.**

That gull-Gulfstream collision might not have turned out as well as it did.

Poppy proceeds

The Grumman Ex-Service Men's Club members have been conducting a poppy drive, and they have constructive plans to spend the proceeds. Through their Hospital Welfare Fund they will buy clothing, canteen vouchers, and hobby craft items for veterans hospitals.

Peter Volpe, acting commander of the club, thanks all at Grumman who participated.

FILM LIBRARY

There is a great variety of NASA motion picture films available from our film library on Stewart Avenue in Bethpage. The films may be borrowed by Grummanites and by various civic groups, schools, professional societies, etc. There is no rental or service charge, but reservations should be limited to three films at one time. **One week's notice must be given in advance of the date for which the film is to be scheduled.** Audience report cards should be completed and returned with the film after the last showing. Your comments, combined with opinions of others, will be used to improve the effectiveness of new productions.

To reserve Grumman films, contact Jeanette Glier, Aerolog Inc., 1211 Stewart Avenue, Bethpage, New York. Telephone: Area Code 516-433-2311, or Grumman Ext. 86919.

Some films of interest to the general public are:

APOLLO LUNAR MISSION PROFILE - 31 minutes, color, sound, 1965. Relates the thrust needed to power man towards the moon. It delineates the three Apollo spacecraft modules in animation. The film continues with an explanation of the launch facilities and the Mission Control Center. A lunar mission profile is portrayed in animation with preflight preparations, launch, earth parking orbit, lunar trajectory, repositioning of the Apollo modules, midcourse corrections, entering lunar orbit, crew transfer, descent lunar exploration, ascent, rendezvous and docking, earth trajectory, midcourse corrections, reentry and parachute deployment. Also see Apollo Lunar Mission Profile—Update 1968.

APOLLO 7 - color, sound, 15 minutes, 1968. Apollo 7 is America's first manned space flight in the U.S. Apollo Lunar Landing program. Astronauts Schirra, Cunningham, and Eisele spent eleven days in earth orbit verifying the Apollo spacecraft. Life and work aboard the spacecraft were recorded on film. A television first from space highlights the film.

APOLLO 8 (Go for TLI) - color, sound, 22 minutes. Apollo 8 - A voyage to the moon—is more amazing in fact than anticipation. Featured are air/ground tapes of astronauts' description of the mission and onboard footage of the earth, moon and IVA activities.

APOLLO 9 (Three to Make Ready) - 17 minutes, 1969. The flight of Apollo 9 stresses the testing of the Lunar Module, the spacecraft that will land men on the moon. Featured are sequences of launch rendezvous and earth terrain. These photographs of the earth terrain become dividends from space.

APOLLO 10 (To Sort out the Unknowns) - color, sound, 25 minutes Dramatizes the analogy between man's flight at Kittyhawk and manned orbital flight. The film portrays Astronaut M. Scott Carpenter's voyage into space on May 24th, 1962, about MA-7. It shows scientific experiments, star observations, and earth's horizon. Climaxing this film is the spacecraft's overshot of the programmed touchdown area, followed by the speedy recovery of the astronaut.

APOLLO 11 (For All Mankind) - 28 minutes, color, sound (no resume available)

APOLLO 11 (Eagle Has Landed)—28 minutes, color, sound. Tells the story of the historic first landing of men on the moon and of their safe return to earth. It documents the Apollo 11 mission from the launching of the Saturn V-Apollo vehicle on July 16, 1969, through the lunar landing on July 20, to the return of Astronauts Armstrong, Aldrin, and Collins to the Lunar Receiving Laboratory, NASA Manned Spacecraft Center July 27, 1969. Principal emphasis is given to activities on the lunar surface. The film is intended to give viewers an eye-witness experience as participants in the Apollo 11 mission. Still photographs, television transmissions, and motion picture scenes recreate the highlights of this great journey.

APOLLO 12 (Pin Point for Science) - 28 minutes, color, sound (No resume available)

BEHIND THE HEADLINES IN SPACE - 57 minutes, color, sound, 1964. Shows many of the intracacies of science, engineering and development at Manned Spacecraft Center. The story behind the headline "U.S. LANDS MEN ON MOON" is illustrated by the activities of several divisions; namely, Advance Spacecraft Technology, Propulsion and Power, Instrumentation and Electronic System Guidance and Control, Structures and Mechanics, Crew Systems and Computation and Analysis.

NOTE: The Grumman film library has a complete list of NASA space films that are available. The demand for these is so great that they must be booked far in advance, but they are outstanding and worth waiting for.

On the line. **Giant contour milling machine, which is tracer controlled, has been installed in Plant 2 Tool Fabrication Machine Shop. At the control console are Jake Van Cuilenburg, operator, with Albert Breitstadt from manufacturer in Heyligenstaedt, Germany. Below are Bill Wolffer of Tool Control, Bill Wilke, supervisor of Tool Machine Shops, and Frank Van Roten, Equipment Engineering, Plant 30. (Al Creech photo)**

If you remember Stearman, join the club . . .

If "Stearman," like Loening, or Grumman, strikes a spark in your memory, you may want to become a member of the new Stearman Alumnus Club, formed to honor Lloyd C. Stearman, Honorary Chairman of the Stearman Board. A function of the club will be the exchange of memorabilia relating to Stearman products "so that we may tie past and present together, preventing the loss of valuable history with the passage of time," to quote the invitation. Applicants are asked to send a dollar (to cover enrollment cost) wih name, address, approximate date you first became involved with a Stearman, and the model designation to Stearman Aircraft Industries, Inc., Fifth floor, 1133 Fifteenth St. N.W., Washington, D. C., 20005.

CALENDAR of events

Notice of events for period of June 26 - July 10 should reach Plane News by **Tues., June 16.**

Amateur Radio Club: Wed., June 17, 5 p.m., Plant 5 Cafe. Field day planning. Emmett Goodman, Ext. 87125.

Assoc. for Computing Mach.: L.I. Chapter, Tues., June 16, dinner 7 p.m., Holiday Inn, Plainview, LIE Exit 46, John McElroy, Exec. V.P. of Computing Efficiency Inc., on "Proprietary Prog. Pkgs." Hugh Winton, Ext. 6351.

Aquatic Assoc.: Fri., June 19-21, Rocking Horse Ranch, Highland, N.Y., $46 members, $51 nonmembers, $15 deposit June 5. Weekend Splash. John Reeves, Ext. 2002.

Chess Club: Tuesdays, 5 p.m., Plant 3 Cafe. Tournament, games. C. Wilkie, Ext. 9941.

Coin Club: Wednesdays, 12:05-12:50, Plant 25 Vendor Conf. Rms. Irv Atkins, Ext. 1874.

Duplicate Bridge Club: Thursdays, 5:45 p.m., Plant 3 Cafe. Reserv. not req. Partnerships arranged. Pete Harrington, Ext. 1812.

Ex-Service Men's Club: First Monday of month, 6:30 p.m., Plant 28 Audit. Exec. & gen. meeting. Northeastern Cadet Corps every Fri., 7:30 p.m., Co. A Cherry Lane School, Carle Place, boys from 10 yrs. Club office, 12:45-1:20 p.m.

Family Campers: Fri., Sat., Sun., June 12, 13, 14, Ponderosa, Bloomingburg, N.Y. Outing. Phil Giacini, Ext. 57-247.

Fencing Club: Wednesdays & Fridays, 5 p.m., Plant 30 Cafe. Joe Campisi, Ext. 1134.

Horseback Riding Club: Every Tuesday, 5:30 p.m., By-Ways Stables, Round Swamp Rd., Huntington. Caren Carlson, Ext. 2725.

Retiree Club: Wednesday, June 24, 12:30 p.m., Holiday Manor. Lunch meeting, entertainment. GAA, Ext. 2133.

Rod & Gun Club: Wed., June 24, 8 p.m., John's Oasis. Monthly meeting. H. Fesq, Ext. 6158.

Stamp Club (Bethpage): First 3 Wednesdays of month, 5 p.m., Plant 30, Cafe. Swap., circuit bk. sales, auctions. Harold Haug, Ext. 3473.

Name 10 high school seniors as winners of four-year Grumma

Happy exclamations. . . . "This is tremendous . . . we're extremely proud . . . absolutely great, just great . . . " burst from the lips of three highly-elated Grumman men recently. The reason for the bubbling enthusiasm was that they had just been notified that their talented youngsters had won four-year college scholarships awarded under the Grumman Engineering Scholarship Plan.

A minimum of three of the 10 scholarships awarded each year by Grumman are given to dependents of Grumman employees, and the celebrating fathers this time were Moe Roth, Grumman Operations manager at the Manned Spacecraft Center in Houston; Joe Tillem of RF Engineering in Plant 14; and Joe Tangredi, of Contracts Change Analysis on the LM program in Plant 25.

Roth's winning youngster was his daughter Sara Jean, a student at Walt Whitman High School in Huntington. Moe lives in Huntington Station and his wife, Lillian, is a "dedicated" guidance counselor at Walt Whitman, Sara Jean's younger sister also attends the school.

The Tangredis reside in North Merrick, where their scholarship-winning son, Michael, attends Sanford H. Calhoun High School. The Tillems live in Hicksville, where his son Jonathan is a senior.

Grumman was one of the first in the industry to help students and universities toward the goals of broadening opportunities and improving American education. Grumman provides a $500 endowment to each school a scholarship winner attends. The Grumman Scholarship plan started 27 years ago, during which time 284 grants have been made; and many of these scholarship winners have gained highly-important positions within the Corporate structure.

Scholarships were awarded 10 Long Island high school students this year. The grants include full tuition plus lab fees for courses leading to bachelor's degrees at any accredited engineering school of the student's choice.

Students selected as scholarship winners may choose to specialize in aeronautical, mechanical, civil, electrical engineering, or other suitable disciplines, including physics and mathematics, providing their primary interest is a long-term career in engineering or supporting fields in the aerospace effort.

Winners of the "Grumman Dependents" scholarships are decided solely on the results of College Entrance Examination Board tests in the March series. Selection of the scholarship winners in the Nassau-Suffolk open competition is made primarily on the basis of over-all academic achievement and apparent engineering aptitude, determined by a series of interviews with the Grumman Scholarship Recommendations Committee. The panel this year included Chairman Charles Tilgner Jr., Art Gilmore, Dick Cyphers, Dick Imgram, Pete Viemeister, and Stan Goldsmith.

The Grumman Scholarship Committee, which approves the final recommendations, consists of Roy Grumman, Honorary Board Chairman; Clint Towl, Chairman of the Board; Lew Evans, President; Bill Schwendler, Chairman of the Executive Committee of Grumman Corporation; and Dr. T. P. Wright, retired, former Vice Chairman of Research, Cornell University.

A total of 71 applied for the Grumman Dependents' awards this year; 163 applications came from other Nassau-Suffolk students.

GRUMMAN DEPENDENTS

SARA JEAN ROTH — Her father, Morris (Moe) Roth, is Grumman Operations manager at the Manned Spacecraft Center in Houston. She ranks third in a class of 739 at Walt Whitman H.S. in Huntington and has an over-all average of 95.6 percent. She is the fourth girl to win a Grumman Engineering College Scholarship. Sara, who won a $100 National Merit Scholarship and a State Regents award, is a member of the National Honor Society, the school's yearbook staff, French newspaper staff, and Mathletes. She is president of the girls' choir, and also was selected for the N.Y. all-state band and all-N.Y. state chorus. Among her wins are a scholarship to the Fredonia Summer

Winners in scholar competition

SARA JEAN ROTH, Walt Whitman H.S., Huntington Station, daughter of Mr. and Mrs. Morris Roth of 55 Bennett Ave., Huntington Station. She will attend Pembroke School of Brown University and major in mathematics.

MICHAEL P. TANGREDI, Sanford H. Calhoun H.S., Merrick, son of Mr. and Mrs. Joseph Tangredi, 1407 Van Nostrand Place, No. Merrick. He will attend Massachusetts Institute of Technology and major in mathematics.

JONATHAN R. TILLEM, Hicksville H.S., son of Mr. and Mrs. Joseph Tillem, 17 Lehigh Lane, Hicksville. He will attend Johns Hopkins University and major in physical sciences.

JOHN L. ERICKSON JR., L.I. Lutheran H.S., Brookville, son of Mr. and Mrs. John Erickson Sr., 19 Sunnyside Blvd., Plainview. He will attend Columbia School of Engineering and major in aerospace engineering.

ROBERT P. FORTUNATO, Valley Stream North H.S., son of Mr. and Mrs. Pasquale Fortunato, 704 Herman Ave., Franklin Square. He will attend Yale University and major in aerospace engineering.

GEORGE A. HERMAN, Long Beach H.S., son of Mr. and Mrs. Nathan H. Herman, 536 East Chester St., Long Beach. He will matriculate at Massachusetts Institute of Technology and major in aeronautical engineering.

JOSEPH E. MARTINO, Valley Stream Central H.S., son of Mr. and Mrs. Nicholas Martino, 246 Buscher Ave., Valley Stream. He will enter Brown University and major in mechanical engineering.

ROBERT SCARINGE, Wantagh H.S., son of Mr. and Mrs. William Scaringe, 2688 Riverside Drive, Wantagh. He will go to Rensselaer Polytechnic Institute and major in mechanical engineering.

ROBERT J. STEINGART, Roslyn H.S., son of Mr. and Mrs. Murray H. Steingart, 79 Westwood Circle, Roslyn Heights. He will attend Massachusetts Institute of Technology and major in electrical engineering.

MICHAEL J. WOLLMAN, Westbury H.S., son of Mr. and Mrs. William L. Wollman, 27 Ash St., Westbury. He will study at Rensselaer Polytechnic Institute and major in aerospace engineering.

Alternates

STEVE A. SCHOENBERG, Division Avenue H.S., Levittown, son of Mr. and Mrs. Gerald H. Schoenberg, 532 Charles Lane, Wantagh. He selected Rensselaer Polytechnic Institute for electrical engineering.

ROBERT F. HOENIG, Mineola H.S., son of Mr. and Mrs. Donald B. Hoenig, 21 Hillvale Rd., Albertson. He selected Rensselaer Polytechnic Institute for electrical engineering.

WILLIAM S. MIRER, Glen Cove H.S., son of Mr. and Mrs. Herbert Mirer, 13 Laurie Place, Glen Cove. He selected Princeton University for aeronautical engineering.

John L. Erickson Jr. L.I. Lutheran | Robert P. Fortunato Valley Stream North | George A. Herman Long Beach | Joseph E. Martino Valley Stream Central | Robert Scaringe Wantagh | Robert J. Steingart Roslyn | Michael J. Wollman Westbury

Engineering scholarships

music clinic, first place in the Suffolk Math contest, and the French award. She participated in the Columbia University Science Honors program, is a member of the Science Service Squad and Biology club, and serves as a Sunday School assistant and YWCA camp counselor.

JONATHAN R. TILLEM—He's the son of Joseph Tillem of RF Engineering in Grumman's Plant 14, Bethpage. Jonathan won the Bosch and Lomb Science award, is a member of the National Honor and Latin societies, and has earned two certificates of excellence in Latin and one in Italian. He won the Nassau Mathletes silver medal and the Midway Men's Club Youth Award in 1969. He also belongs to the Junior Engineering Technical Society (JETS), the Latin, Italian, Chess, Philosophy, and Dramatics clubs. He's a sports fan and coin collector, and is active in almost all the school's intramural sports programs. He plays piano well. He worked at a supermarket as a stockboy while attending Hicksville H.S.

MICHAEL P. TANGREDI—He's the son of Joseph Tangredi, a Contracts Change analyst on the LM program in Plant 15, Bethpage, in the Grumman Manufacturing Plants & Controls department. A member of National Honor Society and winner of a New York Regents scholarship, he participates in a computer program every Saturday at Brooklyn College. He received National Merit letter of commendation, belongs to the American Field Service organization and is on the Mathletes team at Sanford H. Calhoun H.S. in Merrick. He is a member of the Drama and Chess clubs and is a summer camp hiking counselor.

NASSAU-SUFFOLK OPEN WINNERS

JOHN L. ERICKSON JR.—John won the Athlete-Scholar award at L.I. Lutheran H.S., given to the varsity letterman with highest scholastic average. (He ranks second in class of 115.) He played varsity tennis, bowling and baseball. A member of the National Honor Society and a winner of Regents Scholarships, he also came in first in the National Forensic League Degree of Merit and Math Association of America award, and has been on Star Honor Roll for six semesters. He is a member of school and church choirs and is an excellent guitarist in both classical and folk music. He serves as a custodian at Good Shepherd Lutheran Church, and his hobby is "making things," with strong model airplane interests. One of his big dreams is to fly in a Grumman Gulfstream II.

ROBERT P. FORTUNATO — Robert ranks 10th in a class of 345 at Valley Stream North H.S., is a member of the National Honor Society and the Greenkey Honor Society. Medalist at L.I. Math Fair, he won school awards in science, math, and social studies. An accomplished musician, he has been in the All State Orchestra as a violinist two years and the Nasasu orchestra for three years, concert master in District orchestra and the winner of a Lincoln Center Student Award. Also, he is a member of the Music Honor Society. He has created sculptures and builds flying model airplanes. He took a two year medical course at Franklin General Hospital and a computer course at Brooklyn Polytechnic Institute while in ninth grade, won a $500 Newsday scholarship and a $1000 Merit scholarship in addition to pulling in a Grumman four-year engineering award.

GEORGE A. HERMAN—Salutatorian at Long Beach H.S. and a member of the National Honor Society, George captained school Mathletes and won Math association high score award. He ranks second in a class of 408 and has won a Regents scholarship. He has built a number of rockets, has three years of drawing and machine shop, and entered jig design in ASTME contest. Most interested in propulsion in engineering. Worked as camp counselor during the summer and is an excellent swimmer.

JOSEPH E. MARTINO—President of the Student Council at Valley Stream Central H.S., Joseph is a member of the National Honor Society and the French Honor Society. He plays in the school band and stars in varsity football and track. He gained all-division honors in football and has been offered athletic scholarships. He's interested in structural design or stress analysis. During the summer he was counselor in a school playground and busboy in a local restaurant. He ranks 24th in a class of 635.

ROBERT P. SCARINGE—Robert is an honor student at Wantagh H.S., ranking 49th in a class of 427. He participated in Florida Science Study Program, traveling through the southern portion of the state. He attained rank of Eagle Scout in BSA with 21 merit badges, and was Explorer scout for one year. He is a member of Junior Engineering Technical Society (JETS). His hobbies are camping, water skiing and swimming. He has four years of mechanical drawing and has built a model bridge, analytical computer, damper control of air ducting, and electrical drive.

ROBERT J. STEINGART — Robert ranks in top 10 percent of class at Roslyn H.S. and won the Long Island high school award for science in 1969, given by the American Institute of Aeronautics and Astronautics. He is exceptionally competent in the computer field. He was first prize winner in North

(Continued on page 9)

Passport to learning. **Three Grumman families were happy as their youngsters won four-year scholarships in the annual Company Engineering Scholarship Plan. Off to M. I. T. is Mike Tangredi (top), flanked here by his father, Joe, engineer in Plant 25, and mother, Rose. Sara Jean Roth, shown with her mother, Lillian, is headed for Pembroke School of Brown University. Her father is Moe Roth, Grumman Operations manager at KSC. And (below) scholarship winner Jonathan Tillem, off to Johns Hopkins University, poses for a family portrait with dad Joe of Plant 14 and his mother, Sonia. (Scholar photos by Marie Trimborn)**

O. Anzalone, Instr. Test | A. Conchilek, Jigs & Fixt. | E. J. Remski, Plant Stores | A. W. Sabiston, Templates | L. E. Ketcham, Metal Form Tool | M. Scarangello, Tanks & Ducts | V. Zahorcko, Static Test | P. Nonemaker, Wood Shop | H. C. Noonan, Distrib. Serv.

Twelve hit 30-year mark, 23 celebrating silver anniversaries

A dozen men who have completed 30 years with Grumman lead off the anniversary roster for June. Their permanent numbers are all within the 994 to 1043 range. Twenty-two men and a woman are joining the Quarter Century Club with 25 years of service to Grumman.

The 30-year men are: Frank Silha of Prototype, Plant 1; Louis H. Hendel of Cadmium Plate and John Scarpinato of Steel Parts Assembly, both Plant 2; Robert J. Mills, Mfg. Tech. Plastics/Adhesive Bond Admin., Plant 3; Carmine Urce, assistant foreman, Machine Shop, and L. Macon Epps Jr., assistant director, Advanced Civil Systems, Plant 35.

Also Andrew C. Mattenheimer, Material - Space Program; Walter H. Dobson, Project Administration, and Leonard H. Paulsrud, Project Engineering - Development Space, all Plant 25; Henry R. Richter, Production Project Management, Plant 34; Robert W. Knepton Jr., Manufacturing Operations Administration, Plant 55, Savannah; George P. Rueth, Logistics Administration, KSC.

Some of the 25-year celebrators may recall the situation in the Pacific theater of war in the spring of 1945. A Grumman service representative, Harold (Danny) Danklefs, told Plane News in May of '45: "In the Battle of Midway, the task force I was with consisted of the Saratoga and five destroyers and that was all. You can't imagine the size of Task Force 58 in comparison today. Just one division of it has more carriers than the old task force had ships." He added that every fighter aboard his carrier was a Grumman F6F.

•

The 23 who are celebrating 25 years with Grumman are:

PLANT 1: Ottavio Anzalone, Instrument Test; Arthur Conchilek, Tool Fabrication - Jigs & Fixtures.

PLANT 2: Edward J. Remski, Plant Stores & Distribution; Alexander W. Sabiston, Tool Fabrication - Templates: Lester E. Ketcham, Tool Fabrication - Metal Form Tool.

PLANT 3: Michael Scarangello, Tanks & Ducts.

PLANT 5: Vladimir Zahorcko, Static Test; Paul H. Nonemaker, foreman, Wood Shop; Harold C. Noonan, Distribution Services.

PLANT 12: Chester H. Gregory Jr., Facilities Maintenance Administration.

PLANT 16: Edward M. Kuhne, Tool Fabrication - Templates.

PLANT 20: Harold M. Yager, Transportation - Operations.

PLANT 27: Austin P. Ellison Jr., Glass Canopy.

PLANT 29: Clarence Martin, Upholstery; Henry J. Trageser and George J. Moritz, Controls.

PLANT 30: Marie M. Franzese, Cafeteria Accounting.

PLANT 33: Christopher Singleton, Avionics Installation.

PLANT 35: Frank E. Bunce, Structural Development.

PLANT 36: James Donohue, Fuselage Major Assembly; George P. Massey, Production Control - Parts Control/Major.

PLANT 77: Sterling R. Darling, Mfg. Operations & Staff; Charles H. White, Avionics, Stuart.

•

Eighteen will receive 20-year pins from Grumman.

PLANT 1: Nathan A. Kotlarchyk, Project Engineering - Development Aircraft.

PLANT 2: Herman L. Henggeler, Small Parts Fabrication.

PLANT 3: Frank Zolezzi, Mechanical Inspection.

PLANT 4: James C. Vedder, Mfg. Technology - Assembly by Tooling.

PLANT 5: Charles Seibert, Facilities Maintenance; Kenneth R. Fitch, Advanced Concepts; James H. Richter, and Richard E. Waldt, Advanced Aircraft Systems.

PLANT 6; George G. Valentine, Intra-Plant Transportation; Edward Cosbey Jr., Producibility - F-14 Program.

E. M. Kuhne, Templates | H. M. Yager, Transportation | C. H. Gregory, Maint. Admin.

A. P. Ellison, Glass Canopy | C. Martin, Upholstery | H. J. Trageser, Controls

G. J. Moritz, Controls | C. Singleton, Avionics Inst. | J. Donohue, Fuse. Major

G. P. Massey, Parts Control | S. R. Darling, Mfg. Ops. | C. H. White, Avionics

PLANT 7: Matthew G. Fraas Jr., Flight Operations.

PLANT 11: Harold Stroh, Manufacturing Technology - Formed Parts.

PLANT 14: George H. Klaus, manager of Electronic Systems Center.

PLANT 15: Edmond W. Tobin Jr., Program Management - F-14A.

PLANT 25: John H. Morrison, Configuration Data Mangaement.

PLANT 30: Harold J. Rohn, General Purchasing.

PLANT 33: Michael Mongelluzzo, Avionics Instrumentation.

PLANT 35: John G. Roukis, Thermodynamics.

•

Sixty-one men celebrate 15 years with Grumman.

PLANT 1: Michael Di Maggio, Advance Programs - Mfg. Plans/Cost; Ernest R. Hoene Jr., Machine OPS Program manager; Patrick J. O'Beirne, Plant Stores & Distribution; William Crawbuck, Mfg. Technology - Assembly by Tooling; Albert P. LaValle, Structural Designers; James P. Murray Jr., Seats & Survival; John P. Stump Jr., Program Management - F-14A.

PLANT 2: Cajetan A. Posillico, Drop Hammer; Raymond H. Hall, Industrial Engineering - Aircraft; Perry N. DiGiovanni, Manufacturing Technology; Joseph Lago, Mfg. Technology Mechanical Process; Vincent N. DeVito, Mfg. Technology Dept. Engineering & Metr.; William T. Kennard, P/S Verification — Product Support; Edward F. Kellermann, Facilities Maintenance; Robert P. Cogliati, Mechanical Inspection; Warren W. Ungerer, Tooling Inspection.

PLANT 3: Arthur W. Walter, Machine Shop; John T. Villanueva, Honeycomb Layup & Procedure; Anthony E. Quince, Facilities Maintenance; Fred G. Jordan, QC Supplier.

PLANT 5: Walter W. Smith, Environmental Control; Charles E. Teufert, Space Management & Staff; Edward M. Okon, Presentations Services; Henry Frost Jr., Wind Tunnel; Jamas H. Langley, Operations; Francis Schlitz, Inspection - Aerospace Assembly; Richard C. Stevenson, DOD Aircraft - New Programs.

PLANT 6: Martin R. Johnson, Hydraulics, Billie R. Brown, Hydraulics; Joseph P. Spicola, Instrument Systems Design.

PLANT 8: Murray Osmond, Flight Avionics.

PLANT 10: Richard J. Zants, QC Laboratory.

PLANT 11: Michael Demato, Tooling Inspection.

PLANT 12: William Gaine, Charles Morris, Facilities Maintenance; Aldean L. Marrs, Metallurgy & Welding Engineering; John O. England, Measurements Technology.

PLANT 14: Milton F. Michalowski, Hydraulics.

PLANT 15: Richard W. Anderson, P/S Site Requirements; Eugene S. Graziano, Project Engineering - Development Aircraft.

PLANT 17: Arnold B. Skidmore, Central Property Disposal.

PLANT 20: Francis L. Mazzara, Transportation - Operations.

PLANT 21: Salvatore P. Spinella, Inventory Control.

PLANT 22: Harry L. De Muth, Crew & Equipment Integration.

PLANT 25: William W. Peterson, Systems Safety; Peter W. Rapelje, Configuration Data Management.

(Continued on page 10)

Training offers many courses — why not take advantage?

Caps and gowns may be in season on campus, but within Grumman are some graduates who are oblivious to caps and gowns. They're feeling pleased because they have just passed a High School Equivalency test given by the Company.

If you for one reason or another, were unable to finish high school, you can attend a course that will help you get a high school equivalency diploma. The Grumman Training and Development Department helps people help themselves through its Voluntary Education Program, and it has found such responsiveness within the Company that 85 percent of the participants in a recent course qualified for the equivalency diploma.

They may have complained a lot after 10 hours of tests ("I was so tired I went right to bed," . . . "I didn't believe they fingerprinted you," . . . "I was sure I flunked" . . .), but they were enthusiastic.

If you are not a high school graduate, why not visit the Employee Services Office in your plant? The next equivalency course is scheduled to start September 14. You can sign up in August.

Offer new course

Because strain gage installation is of great importance to the Company at present, Product Manufacturing Electronics has requested Training and Development to offer additional instruction to cover the increased workload in the strain gaging field. The first series of classes was presented to electronics personnel, but also planned are modified versions for Engineering and Quality Control people, too. These are 80-hour courses lasting two weeks.

In a recent memorandum on Instrumentation requirements, Augie Walsky, general manager of Production Electronics and assistant to the President, sounding the need for specialized skills training, said, "It is mandatory that we maintain nationwide respect in the state-of-the-art of instrumentation." The course has been updated to include titanium and boron technologies. Newly trained strain gage technicians will get an opportunity to work in a challenging and rewarding field: Instrumentation.

Keeping up-to-date

At Kennedy Space Center, Walter Schnaderbeck of the Training and Development Department, Plant 38, is updating Grumman technicians on the methods and techniques of high reliability soldering. "Strict adherence to high reliability hand soldering and quality workmanship helped to return great dividends when LM-7 turned in its spectacular performance — much greater than originally conceived—during the Apollo 13 mission," points out Steve Biesiadecki of Training and Development.

Technicians are certified after successfully completing a 40-hour course in hand soldering and associated techniques. They must be recertified at least once a year to keep their qualifications current, and a continuous performance evaluation plan has been developed to maintain performance standards.

As Biesiadecki sees it: "It is the strict control of certification and recertification that assures the high quality of Grumman workmanship supporting National Aeronautics and Space Administration space programs."

They made it. Graduates of High School Equivalency course included (L to R) Albert Badstuebner, Final Assembly; Irving Solomon, Production Control; Edith Murway, P/S Records; Helen Ziembicki, Contracts; Bill Schneider, Digital Comp. Keypunch; Joseph Chernes, Electronics Repair. Other graduates were Paul Stein, Bertha Siegl, Michael Scovil, and Rudolph Razzini. (Fred Annette photo)

Business Report

In a recent report to its stockholders for the first three months of 1970, Grumman announced that although per share earnings remained as high as last year's, sales for the corporation reflected the general business downturn being experienced in the nation. Sales for the January-March period dropped to $242,198,867 compared to $288,176,579 for the same period in 1969.

Income was $9,839,992 before taxes and $5,339,992 net income, with $.76 earnings per share. Last year, gross income totaled $10,927,627, while net income was $5,527,627, and per share earnings were $.76, the same as this year.

The sales backlog stands at $860,819,000. Of that amount, approximately $276 million are for orders not yet funded for continuation of the F-14A and LM programs through 1971 only. In 1969, the backlog was just over one billion dollars. That total included unfunded orders of $385 million.

Grumman Goose collectors' item

It took a tiny British colony, St. Vincent in the Windward Islands, B.W.I., to put a Grumman plane on a postage stamp, and here's the stamp to prove it. Bill Mashmann, Navy inspector in Plant 4, who is a philatelist, bought a set of four stamps, issued a couple of months ago. The eight-cent stamp reads "20th Anniversary of Regular Air Services," and, in fine print just above the "8," it says, "Grumman Goose." The other stamps in the series show a Hawker Siddeley, a Twin Otter, and a DC-3.

Mashmann, who usually concentrates for his own stamp collection on United States, Vatican City, and Japan issues, has been active in the Grumman stamp club at Calverton, where he was a Navy inspector until a couple of months ago. He has been with the Navy 28 years, the last five at Grumman. Considers stamp collecting a most relaxing hobby, "and very educational."

Scholars...

(Continued from page 7)

Nassau Science Congress six times. His major design is a computer for voice pattern recognition. Robert is a three-time winner in the L.I. Science Congress. He participated in the Columbia University Science Honors Program three years, and also in the NASA Youth Science Congress at the electronic labs in Cambridge, Mass. One of 12 national winners of award for Recognition of Potential in Exploration and field of sciences.

MICHAEL J. WOLLMAN — Michael ranks fifth in class of 360 at Westbury H.S., and is secretary of National Honor Society; he was a National Merit scholarship semi-finalist. He is treasurer of the Debating Club and was sprinter on the varsity track team for three years. An accomplished clarinetist, he is a member of school band and orchestra. He tutors math, science and clarinet, helps raise funds for Westbury International Student Exchange program.

OBITUARIES

Plane News has received word that death has come to the Grumman personnel listed below. We extend sincere sympathy to relatives and friends.

VIRGINIA RESHETILOFF of Production Control - Parts Control Detail, Plant 6, died May 21. She was 48 years old and had been with the Company since 1948. Her home was at 645-69 Belle Terre Rd., Port Jefferson.

FREDERICK B. LAMUDE of Plant 1 Safety Department died May 24. He was 57 years old and had been with the Company since 1959. His home was at 80 W. Jericho Tpke., Syosset.

RALPH J. BORRELL, a technician at Plant 55, Savannah, died May 25 at the age of 38. He had been with Grumman since 1966, and he lived at 10611 Abercorn Expy., Savannah, Ga.

RICHARD J. MAHONEY died May 27. He was 55 years old and had been with the Company 26 years. He worked in Tool Fabrication - Cutting Tool/Engineering, Plant 6, and his home was on Valley Circle Drive, Miller Place.

JANET L. ANDERSEN, who worked in Plant 5 Mail Service, died May 28 at the age of 20. She had been with the Company six months. Her home was at 105 Pickwick La., North Babylon.

HENRY S. KWIATKOWSKI of Plant 5 Facilities Maintenance died May 29 at the age of 53. He had been with the Company 25 years, and his home was at 2146 Pine St., Baldwin.

SALVATORE A. PROSIDA of Mechanical Inspection, Plant 36, died May 30. He was 45 years old, and he had been with Grumman 18 years. He lived at 148 Udall Rd., West Islip.

JOHN W. TINDAL of Maintenance - Transportation in Plant 55, Savannah, died May 31. He was 34 years of age and had worked for the Company since 1967. He lived at 1405 Cathy St., Savannah.

JOSEPH B. BECKER died June 1. He was 50 years old and had been with Grumman four years. His department was Machining Engineering in Plant 3, and his home was on Elm La. in Stony Brook.

Savings Bond drive nears 100% as 24 collect prizes in drawing

Thirteen an unlucky number? Who says? Lots of people, maybe . . . but not Ed Merriam of Program Management. His name was the 13th picked in the Savings Bond drive drawing—and he couldn't have been happier!

"It's the first time I ever won anything and I've participated in 42 drawings," said Ed, who chose the G.E. 16-cubic foot upright freezer. (And this time he wasn't out in the cold.)

Then there was the case of Tsun Fang of Systems Research. When Kay Zuk of Employee Services called Fang to notify him of his good fortune, he misunderstood and protested mildly. He thought she was calling to ask him to join the Payroll Plan to buy bonds. "I've been buying a bond a week for the past couple years," he said. Finding he was a winner made him happy, to put it mildly. Fang chose a Sylvania Stereo, 25-inch color combination.

Tsun Fang
Top prize winner

The drawing took place on May 20 at 10 a.m. Vice Presidents Jack Rettaliata and Tom Rozzi were there, along with Augie Walsky, general manager of Production Electronics and assistant to the President, and Gus D'Errico, director of Employee Services.

The winners gathered in Plant 30 the day after the drawing to select their prizes.

The Bond drive still goes on, with the final target still 100 percent. As of May 22, there was 95.3 percent participation; and that's a long way from last year's 78.1 percent.

A list of the 24 winners appears below:

1. Tsun Fang, Systems Research, Plt. 35 - Sylvania Stereo, 25 in. color combination - with a one year contract.
2. Mary Brunner, Prod. Support Factory Support, Plt. 34 - RCA 25 in. wood console TV - with a one year contract.
3. William Dunn, Acoustics & Vibration Environment, Plt. 35 - RCA 25 in. wood console color TV - with a one year contract.
4. Lawrence Mestell - Machine Shop, Plt. 3 - Sylvania 25 in. console color TV - with a one year contract.
5. Mark Mellinger, Engineering Operations Administration, Plt. 5 - G.E. Portable 18 in. color TV, with a one year contract.
6. Frank Sticco Jr., Plant Protection, Plt. 18 - G.E. American Double Oven range.
7. Frank Distefano, Manufacturing Test Group, Plt. 39 - Sylvania Stereo-Radio-Phono combination.
8. Morton Danin, Product Suppprt Digital Engineering, Plt. 34 - G.E. 16 cu. ft. 2-dr. Frost Free refrigerator.
9. Gary Scherer, Final Assembly, Plt. 3 - Westinghouse Duplex Refrigerator, Frost Free.
10. Einar Dahlman, Prototype Electronic Development, Plt. 14 - G.E. 14 cu. ft. 2-dr. Frost Free Refrigerator.
11. Jasper Mauceri, Hydraulics, Plt. 2 - G.E. Undercounter dishwasher.
12. Henry Hinz, Account. Admin. Plt. 30 - G.E. 23 in. TV black & white console.
13. Edward Merriam, Program Management - F-14A, Plt. 15 - G.E. 16 cu. ft. Upright Freezer.
14. Robert Corrigan, Production Control - Records & Release, Plt. 38 - G.E. washer and dryer.
15. Dealmos Gaines, Paint Shop, Plt. 77 - Sylvania Stereo AM-FM combination.
16. Joseph Coffey, Contracts Revenue, Plt. 30 - 23 in. table model TV with stand.
17. Dolan Cantrell Jr., KSC Operations Support, Plt. 83 - G.E. Electric range.
18. George Dering, Inspection - Mechanical, Plt. 2 - G.E. 12 in. Portable color TV.
19. William McCarthy, Product Support Site Supply, Plt. 15 - 19 in. portable with stand.
20. Albert Grafenstein, Router and Shear, Plt. 2 - G.E. Automatic Portable Dishwasher.
21. George Duffy, Operations Analysis & Planning Research, Plt. 5 - G.E. 16 lb. automatic washer.
22. Herbert Schulman, Operations Planning and Budget, Plt. 15 - Whirlpool automatic 16 lb. washer.
23. Roy Fagin, Medical, Plt. 28 - G.E. Automatic Dryer.
24. Miguel Ramos, Final Assembly, Plt. 5 - Polaroid Electronic Flash Camera #360.

Drawing a crowd. **As Employee Services head Gus D'Errico (R) waits, Mollie Lou Zak (C) of Product Operations, Plant 5, selects a winning ticket in drawing for participants in Grumman's payroll savings plan for U.S. Savings Bonds. (Photos by Marie Trimborn)**

Speaking up!

Is the space program a waste of the taxpayers' money, a series of glittering spectaculars signifying nothing? U.S. Rep. John Wydler of New York thinks not, as some of his remarks on the floor of the House reveal.

"The important question to ask is what is the space program doing for people, for their health, longevity, for purifying the air they breathe, for the security of their homes and families, and many other facets of daily life." As a case in point, he mentioned Grumman's Lunar Module:

"During the course of research into the biomedical aspects of the LM, Grumman engineers became aware of work being done by Dr. DeBakey, the famous specialist in heart transplants, in developing a device by which the hearts and lungs could be kept alive and transported from one place to another. This was needed because donors and recipients sometimes cannot be brought together in the same hospital.

"The Grumman engineers quickly saw that by applying Apollo technology . . . they could produce an efficient and highly reliable device to do the job. This device is already being used to great advantage by giving to medical researchers at the Baylor College of Medicine a means by which they attack the problem of organ incompatibility and rejection."

As the Congressman points out, this type of scientific advance affects all human life—and too many people are not aware of the vital importance of such space technology spinoffs. Wydler thinks that they must be made aware, and that House members should spread the word among their constituents:

"I think that whenever opportunity presents itself, we can propagate the idea that in human terms the space program has (paid off) and will continue to pay off the investment that the American people have made in the exploration of space."

June anniversary list...

(Continued from page 8)

PLANT 28: Harry A. Volz, deputy director of Personnel Services.

PLANT 29: Louis Giani, Upholstery.

PLANT 30: Richard Heiligenstadt, Facility Project Management.

PLANT 33: John J. Proscia, P/S Structural Mechanical Engg. Design; Joseph C. Welsch, P/S Electronic & Integration Engg.

PLANT 34: Richard L. Ellingsen Jr., Crew & Equipment Integration;; Michael S. Antieri, Contracts Aircraft.

PLANT 35: Joseph Morgan, Flight Controls; John B. Smedfjeld, Aeroelasticity Methods.

PLANT 52: Warren Butler, MSC Manufacturing Shops, Houston.

PLANT 83: Lawrence J. Cervellino, KSC Base Management; Walter Majkowski and Gerard Kreussling, KSC Test Operations; Joseph M. Schneider, KSC Quality Control.

PLANT 87: Jay G. Gaines, Quality Control Supplier, Los Angeles.

Picnic July 18

Put a brass ring around Saturday, July 18—that's the day of the Grumman Family Outing . . . and what a day it always is!

Games, dancing, entertainment, food, fun, festivity . . . joyous rides for the youngsters. You name it and this gala carnival has it.

Tickets are now available at all Grumman Employee Services offices. They are priced at $2 each for adults. Children under 12 are admitted free.

Participation in this frolic is limited to Grumman employees or members of their families living in the same household. Single employees, however, are permitted to bring a boyfriend or girlfriend.

There will be more about this annual extravaganza in later issues of Plane News. If you've been there before you know what fun it can be, particularly for the youngsters. If you haven't—it's something you shouldn't miss.

About the ads . . .

Accompanying this issue of Plane News is a four-page ad supplement that will be distributed at Long Island plants.

plane GRUMMAN news

Published twice a month for the employees of Grumman Aerospace Corporation, Bethpage, N. Y. 11714, as a function of the Public Affairs Dept., Vice President J. B. Rettaliata, director.

Editor
Brian Masterson

Associate Editors
Claire Imrie
Al Wehren

Ads, Distribution
Dorothy Zeeb

Official Photographers
Presentations Services

Telephone
Plane News: 3293
Plane News from outside line:
LR 5-3293

Tee time for Mixed Pinehurst

Grab your partner, and away we go . . . the first of three Mixed Pinehurst golf tournaments sponsored by the GAA will be played on Wednesday, June 24, at the Bethpage State Park Yellow course. Tee time will be between 4:30 and 5:30 and entries will be accepted at the GAA office on a first-come, first-served basis, as the field will be limited to 60 players.

Entry fee is $3.50 for each player, and registration is to be made with Mike Cherry in the GAA office, Plant 28B. He may be contacted on Ext. 2269 or 2133.

There will be a team award for low gross, in addition to many kicker's prizes.

In Pinehurst play, both partners tee off, hit each other's drive on the second shot, and then select the best ball for the third and subsequent strokes, alternating shots until they hole out.

Other Pinehurst tournaments are scheduled at Bethpage on July 22 and August 16.

Intruders nipped at Beach tape but tune up for Industrial race

Grumman's Intruders are on the prowl again, chasing the Rhode Island Industrial Invitational crown at Warwick, R.I., this weekend, but really lurking for another shot at the World's Industrial slow-pitch softball title, to be played this year at Jones Beach.

Manager John Giordano's club went to North Carolina for the Industrial last season and finished fifth, after they had won the Metro-Long Island tourney and the Invitational event. In 1968, they carried home the World's Industrial crown at Warwick, where they are headed for play June 12-13-14.

Giordano has practically his entire squad back from last year, with the exception of big Jim Verteramo, the power hitter who has been MVP a couple of years in the L.I. Industrial tourney. Verteramo is wearing the colors of County Sports this year, national open champions two seasons ago.

Newcomers help

"Jim's loss is our biggest problem, Giordano admitted. "There's no doubt he's a big asset to any team and we'd very much like to have him back. But we have good bench strength with the addition of a couple of newcomers like Bill Diercks and Dom Pagnozzi, and I look for the club to come along. We're depending on Bob Heiter and Don Lundergan for the pitching this year and our regular starting outfield is Diercks, Ken Smith, Mike Sabia, and Joe Cavalluzzo. Joe's one of our originals, you know, starting with the Intruders 11 years ago."

Giordano has Fred Neuscheler on first, Jim Karika on second, Hal Manaskie at short, and John Andrews at third. Dan Cooper and Joe Stalzer share the catching. Stalzer is a newcomer, and last year Cooper made the All Star squad in the Nationals with Verteramo and Neuscheler. Cooper was then playing the outfield.

This combination, spelled here and there, staged a tremendous comeback recently to take second place in the Industrial division of the L.I. Invitational slow-pitch tourney at Jones Beach. Grumman was stopped in the opening round of the double elimination event by the Nassau County Police, 10-4. But then the Intruders roared back for five straight victories to reach the tourney finals, staging several sizzling rallies to win the hearts of the spectators.

The Intruders defeated Elwood of Huntington, 16-8; Kenny Manufacturing Co. of Conn., 13-12; A & P of Garden City, 12-4; gained revenge against the Nassau Police, 10-9; and upset LILCO, 14-6, to emerge from the losers' bracket into the finals where they lost to Pepsico of L.I. City, 14-6.

"We were on the field for hours and hours," explained Giordano, "and just simply ran out of gas."

Bob Hieter pitched all the way for Grumman, winning six games over the weekend and losing two. He twice won games with late-inning hits, shading the Police once and knocking in the winning runs against Kenny. Hieter batted .619 with 13 hits in 21 attempts, getting three RBI's. Neuscheler was a big gun with 10 RBI's and a tourney bat mark of .675, while Cavalluzzo had eight RBI's. Cooper distinguished himself with 13 RBI's and a .460 BA.

Schlott is back

Giordano is again being assisted by veteran Ed Schlott, with Jack Keane and Fred Vitale as coaches.

The Intruders are competing this year in two leagues, rating at the .500 mark in the strong Nassau Open circuit at Cantiague Park in Hicksville, absorbing two losses to the County Sports and one from the Wantagh Nets, while twice beating Russell's of Freeport and returning to trip the Nets. The Intruders start at Jones Beach June 15 against Pepsico.

Over the weekend of July 9-10-11, the Grumman club will compete in the Industrial tournament at Richmond, Va.

Alverson tops varsity golfers

Veteran Jim Alverson, who helped Grumman to its sixth straight Industrial league title last year led the qualifiers for the 1970 varsity golf team in the tryout tourney at Bethpage. Alverson carded 232 for the 54-hole event, nosing out perennial star Tony Cisco by a stroke while carding the tourney's best round of 74 on the final round.

Three of last year's varsity, John Malanczuk, Bill Suppa and Caesar Roscigno failed to make the team this season. They were replaced on the squad by Ken Cunningham, Bob Heider, and Walt Gill.

Third place in the trials went to Bob Holsten, the early leader, who finished with 235 after an 80 on the final 18 holes. Cunningham. Heider, veteran Steve Gray, Walt Gill, and Gene Piwowar rounded out the eight-man squad.

The scores:

Varsity qualifiers			
Jim Alverson	80	78	74- 232
Tony Cisco	80	76	77- 233
Bob Holsten	77	78	80- 235
Ken Cunningham	79	82	83- 244
Bob Heider	81	86	78- 245
Steve Gray	83	82	81- 246
Walt Gill	82	89	76- 247
Gene Piwowar	84	85	79- 248
Non-qualifiers			
Jim Herzberg	88	83	79- 250
Ted Domagala	82	88	80- 250
John Malanczuk	80	86	84- 250
Bill Suppa	83	88	82- 253
Caesar Roscigno	81	90	83- 254
David Gibson	79	91	85- 255
Richard Suttmeier	84	78	95- 257
John Davidson	83	90	87- 260

He's perfect

Al Burns, a real hot shot from Plant 36 Manufacturing, took a long stride towards another State rifle title recently when he posted a perfect prone score of 200-20X to take first place in the Expert division of the Eastern Sectional tourney of the New York State championships at the Roslyn range.

Bat binge rough on scorekeepers

The hitters were in complete control as play got underway in the after-hours softball leagues, with the spotlight on the Campbell Kids in the National division of the Tuesday night circuit.

The Kids had red-hot bats in a 32-8 victory over the Zots, pounding out 35 hits and scoring heavily in every inning.

Sam Cozzetto, Lou Pizzo, and Don Boden wrecked the Zots with five hits each. Cozzetto slugged three triples and Pizzo two homers, while Vinny Pettruso added to the romp with two circuits. Campbell hurler Joe Catanzaro fanned six.

In another Tuesday National slugfest, the Mohawks rallied with 13 runs in the sixth to defeat the Aquarians, 30-27, in a base-running marathon. The hits were not reported as the scorekeeper probably gave up in despair.

Four homers were recorded, all by the Aquarians, as Doug McDonough, Bill Maxwell, Jim Gioffe and Jim Eng hit for the circuit. But to counter this, the Mohawks slashed 15 extra-base hits, with Pat DiGiantonio tripling, Tom Fry getting three doubles. Jim Eckert, Tom Maurici, and Ed Viskup each had a pair of two-baggers.

Terlizzi sparkles

In the Tuesday American loop, the Titans nudged the Digital Dyns, 16-13, with 16 hits; winning hurler Jack Ferfante allowed 14. Tom Terlizzi was the Titans' star, socking a homer and driving in the deciding run in the bottom of the sixth. The Woodpeckers battered the Bad Guys, 21-5, with a 27-hit explosion. George Cumberland, Jack Pantano, and Frank McBrien were the hitting stars, and Dick LaSala socked a triple and homer.

The Hawkeyes clouted 24 hits in a 17-5 win over the OAO Stars as play started in the Monday National loop. John Rizzo socked four hits, including two homers; Dick Engelbart had a homer among his four hits, and Mike Mole was also four-for-five.

Hitting by Tony Marrocco and Joe Manfre and sharp defensive play at short by Mike Moody led the Druids to a 7-5 win over the Vikings. Marrocco was also the winning pitcher.

Varipapa's four straight strikes put Jets in right lane at Plant 3

The name of Varipapa is one of the most famous in bowling, but one of this clan is now making quite a name for himself on the softball fields of Grumman. Frank Varipapa, nephew of Hall of Famer, Andy, was the big gun for the Jets recently in the Second Lunch circuit at Plant 3.

Varipapa went 4-for-4 as the Jets outslugged the Mets, 15-11. The Jets clouted 20 safeties along the way and rolled up an 11-2 lead in the first two innings.

Pete Bitter and Joe Brix also starred for the Jets with three hits each, while the Mets' stars were Bob Wasley with a homer and Ed White with three hits for a perfect day.

In another Plant 3 game, the Jokers beat the Commanders, 13-6, rallying with six singles and eight runs in the top of the 5th for their first victory. Jim Pope did some fancy pitching for the Jokers, aided by the infield combination of Bill Arnold and Bill O'Connell. Ed Gregg homered and Mel Williamson clipped two doubles.

At Plant 1, the ECCO's tumbled Flight, 11-3, as Gerry Farley went 4-for-4 to pace their first victory.

The Mets Fits picked up a 12-6 victory at Plant 7, Calverton, with pitcher Charles Darling taming the Bombers. Tom Block rapped three hits, Pete Tummillo doubled, and Van Westfall was 4-for-2, with a double.

In the Plant 5 circuit the Avengers won a thriller from LM Stock 11-10, coming from behind on Harold Brower's sixth-inning triple. Bob Nielsen was the winning hurler. Mike Ventura and Bernie Bernier also socked three-baggers.

Name Oram to Sloan Fellowship Program

Pete Oram, director of Contracts, has been chosen by Grumman and the Massachusetts Institute of Technology to be a Sloan Fellow for the year 1970-71. He

Pete Oram

follows Tom Kelly, LM assistant program director - Engineering, who is just completing his year as a Sloan Fellow with a trip to Europe—part of the course.

The Alfred P. Sloan Fellowship Program annually accepts 50 young executives from the United States and abroad for a management program "designed to broaden and develop outstanding but typically specialized young executives for more general and senior management responsibilities in the future."

Since last December, when he succeeded Burt Stern, Oram has been director of Contracts, and since February, a deputy director on the F-14 Program. He was Contracts manager on the F-14 Program from 1968 to 1969. For a year before that he was assistant director for Aircraft Programs in Contracts.

Oram attended Brown University and was graduated from Colby College in Waterville, Maine, with a bachelor's degree in history. For three years he was a pilot of heavy transports in the Air Force before joining Grumman in Correspondence.

He moved to the A-6A Program as assistant contract administrator in the spring of '61. From there on he was in contracts administration or business management; '66-67 he was business manager for the Product Support Department.

Oram, his wife, Myra, and their two daughters, Susan and Myra, will live in Winchester, Mass., for the coming year. Oram's fellowship will conclude with the writing of a thesis for a Master of Science degree in Industrial Management. In Contracts during his absence Rolf Larson will be acting director and Frank Wisekal, acting deputy director. They are in Plant 5, Ext. 7460 or 1043.

About the cover

If you like the cover of Plane News, tell Jim Rodriguez about it. Jim, who works in Presentations Services, Plant 5, made the wash rendering of the moon, the Apollo 13 spacecraft with its "lifeboat" Aquarius, and the distant earth as a fitting backdrop for President Nixon's letter.

First group of 16 engineers completes development course in management

"Management development" is a phrase that could open some new doors for Grumman engineers. A company needs men trained in supervision and management in order to maintain its competitive position, and Grumman's Training and Development Department is working closely with Engineering on a program that will do just that. The Management Development Program has the support of Grant Hedrick, Senior Vice President, Technical Operations; George Skurla, Vice President and director of Product Engineering; and Jake Bussolini, director of Engineering Operations and Administration.

Sixteen engineers who have just completed a course in "Effective Oral Communications" include group heads, group leaders, administrators, section chiefs and project engineers. Other courses being offered by Grumman Training and Development Department leaders, under the direction of Art Gilmore, include "Basic Principles of Supervisory Management" and "Supervisory Development Program, Phase I and II," for group leaders and group heads.

Films and free wheeling discussions enliven the sessions.

Double duty for F-14 mockup

Scarcely recognizable in its white cocoon, the F-14 full-scale mockup from Plant 1 stands out in the weather behind Plant 14 in a new role—that of avionics mockup. The shroud is good old Navy mothballing, to protect the mockup from the elements. The underbelly has been sprayed with two layers of hot metal to simulate the metallic surface of the actual aircraft.

The idea for extracting some extra mileage of the F-14 contractual mockup (already the object of much official scrutiny in Plant 1) occurred to Engineering Mockup Manager John Arlin. He called in Mike Hlinko of Aero Test, and they considered the possibility of treating the mockup in Plant 1 so it could be used for avionics antenna testing without the expense of building a new mockup for the purpose. The details were worked out, and the Navy concurred.

To insure a good base that would peel off when the F-14 returns to Plant 1 next fall, a wax coating and then a protective black coating were applied. The white coating on top of that is weatherproofing such as is used in the mothball Fleet.

Next the underside of the fuselage was made radio-frequency conductive with a spray coating of hot zinc and another of tin and copper. This done, the mockup was ready for the meticulous testing of antennas for the Phoenix and Sparrow Missile and F-14 avionics systems and their location compatibility. Tests will be run all summer under the direction of Bob Savasta of RF Engineering through September. Then off comes the mothballing, and the mockup goes back to Plant 1 to be prepared for initial exterior lighting evaluation. (Photo by Nat Scherer)